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POLYPODIUM VULGARE L. VAR. AURITUM WILLD.

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American fern students seem to differ in regard to their conception of *Polypodium vulgare* L. var. *auritum* Willd.; the characteristic ear-like appendages borne on fronds of that fern, being described as occupying various positions. My attention has been recently called to this matter, by an article in the *American Fern Journal* (Vol. 1, pages 7-9) "*Polypodium vulgare* in Maine," by Henry W. Merrill, where the statement appears that the true var. *auritum* is not eared on the upper side of the segments. On page 8, Mr. Merrill says, "Still another form has been found that, unlike *auritum*, which has ears on the lower side of the pinnæ, has ears on the upper edge of the pinnæ only. Mr. W. N. Clute says that this form is new, and the finder is hunting for a name, but so far he has been unsuccessful." Mr. Merrill, unfortunately, does not attempt to substantiate his assumption that the true var. *auritum* is not eared on the upper side of the segments and I am unable to conceive what ground he has for this belief.

Polypodium vulgare L. var. *auritum* Willd. is a form found occasionally in New England, easily distinguished from other varieties by the presence of ears or auricles on the lowest segments next to the midrib. These ears or auricles may be borne on the upper border, on the lower border, or on both upper and lower borders of the lowest segments.

Considering the fact that American botanists have only recently evinced active interest in fern variation, it is not surprising that meagre descriptions of these most interesting forms are found in American textbooks, or perhaps no mention of them whatever, and that they are not well understood. For instance, our most pretentious

fern manual contains no description of var. *auritum*, merely referring to it as an "occasional monstrosity."¹ The seventh edition of Gray's Manual, however, accurately but very concisely describes the form in these words: "var. *auritum* Willd., with the lowest segments auricled."²

Abroad, however, and particularly in Great Britain, much attention has been given to fern varieties, and considerable specializing has been done in this particularly interesting field. Moore describes the form in these words:

"*auritum* (Willd.). This variety has at the base of the lobes on their anterior side, that is next the rachis on the *upper* margin, a distinct lobule or auricle, forming a kind of ear, from which it takes its name. The auricle is variable in respect to its appearance and size."³

The beautiful colored plate (11-*B*) shows a frond auricled only on the anterior side. Mr. E. J. Lowe, another eminent English specialist, describes the form as follows:

"*Auritum*, Moore (Fig. 9) The distinguishing peculiarity is an ear-like appendage or lobule, attached sometimes to the anterior, and at other times to the posterior base of the lobes; mostly this distinct auricle is on the anterior base of each of the lower lobes. A small variety, occasionally rather bifid. Outline of the frond normal."⁴

An excellent figure accompanies the description, showing a frond auricled on both anterior and posterior edges of the lowest segments.

Dr. Milde, a pioneer worker in the field of fern variation, has the following description:

¹ D. C. Eaton. *Ferns of North America*. 1: 241.

² Robinson & Fernald. *Gray's New Manual of Botany*. 7th ed., page 34.

³ Moore. *Nature Painted British Ferns*. 1: 65.

⁴ Lowe. *British Ferns*. 1: 29.

"Var. *auritum* Willd., *P. auriculatum* Schur. Lower segments, occasionally the upper segments also, auricled on their upper sides or on both sides. . . . Allied forms exhibit irregularly cut and pinnately lobed segments. . . . Very often it produces monstrous forms, with the frond forked at the apex or with the segments variously forked and dichotomous."¹

From these descriptions and figures by eminent fern specialists, it seems apparent to me that Mr. Merrill's fronds of *Polypodium vulgare* L. with "ears on the upper edge of the pinnæ only," are undoubtedly true var. *auritum* Willd. Moore and Lowe particularly emphasized the statement that var. *auritum* is eared on the *anterior* side, on the *upper* margin of the lowest segments or lobes; exactly the form described by Mr. Merrill. That they knew what they were writing about is especially borne out by an examination of the original description of the variety, which (translated) reads as follows: "Lower pinnæ of the frond auriculate on the upper basal portion, auricles lanceolate.—W."² If there is any reason why such a form as Mr. Merrill describes should bear another name, I should very much like to have it presented.

To the amateur who finds in America some peculiar form not described in our textbooks, and is tempted to name it, I would add a word of caution. Remember that many forms and varieties have already been described by foreign fern students, and before further burdening nomenclature with new combinations that only increase the difficulties of an intricate problem, remember that the only safe course is to make sure that your supposed peculiar form is not among those already described abroad.

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¹Milde. *Filices Europæ et Atlantidis*, etc., translated from the Latin, page 18.

²Willdenow, *Sp. Plantarum*. 5: 173. 1810.